

## ABSTRACT OF THE DISCLOSURE

A system and method for estimating a channel spectrum. The method includes: (a) receiving an input signal from a channel, where the input signal includes one or more major echoes and zero or more minor echoes introduced by the channel; (b) identifying the one or more major echoes present in the input signal; (c) identifying the minor echoes from a filtered autocorrelation function of the input signal in response to a determination that there is only one major echo; (d) identifying the minor echoes from a filtered power spectrum of the input signal in response to a determination that there is more than one major echo; (e) computing a channel spectrum estimate from the major echoes and minor echoes; where the channel spectrum estimate is usable to remove at least a portion of the one or more major echoes and one or more minor echoes from the input signal.

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